

and mingled with a tremulous cry. It breeds in February, nestling in hollow trees, and laying from two to four roundish white eggs.

29. *KETUPA CEYLONENSIS*, Gmel. *Baccamooney*, Cing.
Oomuttanloovey, Mal.

These large owls are common through the island, both in the interior and on the sea-coast. They feed much upon fish, which they catch in the shallow mountain rivulets during moonlight nights. I have several times had them alive, and they devoured fish with avidity. When alarmed during the day, they utter a loud hissing note subsiding into a low growl; during this time the throat is much inflated at the white spot. I hear that they breed in hollow trees and clefts of rock, laying two large white eggs.

30. *SYRNIUM INDRANI*, Gray. *Oōlama*, Cing.

Inhabits dense and lonely jungles, and utters the most doleful cries, which the natives (a very superstitious race) consider the sure tokens of approaching evil.

31. *STRIX JAVANICA*, Gmel.

The only locality in Ceylon for this bird is the pretty fort of Jaffna. Here several pairs may be nightly seen perched on the gables of the old Dutch church, or on the dilapidated bastions of the walls. They feed much on fish, which they capture in the shallow water of the estuary commanded by the fort.

[To be continued.]

XI.—On the *Rissoa rubra*. By WILLIAM CLARK, Esq.

To the Editors of the *Annals of Natural History*.

GENTLEMEN,

Exmouth, June 26, 1853.

IT is stated in a paper of mine on the *Rissoæ* in the 'Annals,' vol. x. p. 262. N. S., "that the *R. rubra* is very common alive in certain localities, and that I have never seen the animal, and can scarcely believe it to be a true *Rissoa*, as the semitestaceous operculum and its apophysis are more like those of a *Chemnitzia*."

This view is corroborated by the reception this day, by favour of Mr. Barlee, of many lively specimens sent from Penzance in a bottle of sea-water by post, which has enabled me to get notes of all the organs. I am not aware that this curious, I may almost say, anomalous species, has ever been mentioned beyond a very slight notice by one or two authors, which in most respects

is so discordant with the animal now presented, that one would almost think some other had been inadvertently observed; perhaps a young example of the more tumid red-brown variety of the *Rissoa ulvæ*. I judge so, because authors describe their animal with very long and setaceous tentacula, whereas the true *Rissoa rubra* has those organs particularly short and smooth. M. Philippi's account is the best, but sadly deficient in the principal peculiarities of the animal. I think malacologists will be glad of a somewhat enlarged description.

Barleecia rubra, nobis.

Rissoa rubra, auct.

Shell.—The colour is plain red-brown, smooth or slightly wrinkled, of $4\frac{1}{2}$ to $5\frac{1}{2}$ tumid volutions, which form a rapidly increasing cone. Aperture oval, entire, contracted above, rounded basally, outer margin sharp, without the callous pad of the *Rissoa*. Axis $\frac{1}{10}$ th, diameter $\frac{1}{17}$ th of an inch.

Animal.—The mantle is plain, even with the margin of the shell, and without the filament seen at the upper angle of the aperture in many of the *Rissoa*. Rostrum very short, not corrugated nor capable of much extension, brindled above with dark smoke-coloured, fine irregular close-set lines, below of pale yellow; buccal disk of the same colour, of small area, crosially and vertically cloven, containing the usual masticatory processes of the *Littorinidæ*; neck dark, but not so much so as the rostrum, quite plain and without appendages. Tentacula very short, strong, broad, not in the least setaceous, with perfectly rounded somewhat spatulate extremities; they are not vibrated on the march: colour very pale yellowish white, with a line of sulphur-coloured beads or minute flakes running centrally from base to point: eyes very large, black, fixed on bright sulphur inflations at the external bases. Foot an elongated, rather narrow oval, rounded anteaally, labiated, with scarcely perceptible auricular points, posteaally rounded, emarginate in the centre of its termination; colour in the middle of the upper part confused flake-white, margined with a belt of pale smoke hue; sole pale yellow, with a decided depressed longitudinal line on the centre of the posterior half, not constricted under the slight auricles as in *Rissoa*, and not so slender; the operculigerous lobe is small, very little alated anteriorly, but expands below into a dark, flat, arcuated membrane; no cirrhus is visible, and I believe none exists; it carries a strong red-brown suboval testaceous operculum, sharp above, rounded below and at the outer edge, and straighter on the columellar side. The structure of the fine striæ on the upper surface is of subannular figure, with a longi-

tudinal furrow about the middle, which forms a raised rib on the under part, the whole of that area being thick, coarse and irregular, with, at the nucleus, which is nearer the base than the centre, a long, strong-pointed testaceous apophysis, more prominent but not so medial as in *Jeffreysia*, but stronger and longer; indeed as much so as in some of the *Chemnitzia*.

These animals inhabit the lower littoral levels at Penzance, their locomotion is deliberate, and they evince considerable shyness. There are many fasciated varieties and a white one.

This animal nearly approaches the littorinidan group, and conducts from *Rissoa* to *Jeffreysia*: as the latter and it have analogous subtestaceous opercula and apophyses, they naturally lead to the *Pyramidellidæ*. But this species cannot be placed in *Rissoa* on account of the singular operculum, as the like is not seen in any other species of that genus, and for many other animal discrepancies. Philippi unaccountably omits all mention of the principal peculiarity, the curious operculum, but he does say that the animal departs somewhat from those he has examined, both as regards the organs and the shell; and I add, that with the exception of the very short muzzle and depressed line in the after-part of the foot, there is not another external organ that has much concordance with the typical *Rissoa*.

Neither can it be associated with *Jeffreysia*, which, indeed, agrees with it, essentially, in respect of the operculum, but the animals of the two are very different. I shall therefore propose for it a new genus, which ought, I think, with *Jeffreysia*, to form a family intermediate to the *Littorinidæ* and *Pyramidellidæ*. I have omitted to mention that M. D'Orbigny's subgenus *Rissoina* cannot receive it, as with a testaceous operculum and apophysis, it is of the spiral or littorinidan type, whilst the present object is of subannular elements; and I consider the operculum, though so much neglected, to afford a most important generic and differential diagnosis; but independent of these points, I could not, agreeably to my views, accord with such an allocation. I repudiate all *subgenera*, which I consider as an awkward attempt to define what is undefinable—an intermediate condition between a genus and a species. I think, when a species is so discordant with the generic type, that it ought to merge elsewhere, and take on a substantive capacity and become the type of a new genus; but there can be no objection to the term *sub* when used adjectively to qualify a word, as subannular, subrotund, and subsymmetrical, &c., but not substantively, as then it becomes the source of innumerable absurdities; therefore with me a genus has no intermediate state beyond species and their varieties. I have mentioned these views in the last paragraph of a former paper in the 'Annals,' vol. vi. p. 29. N. S.

I would therefore now submit to malacologists, as I have shown that no existing genus can with propriety receive this curious creature, that a new one be constituted for it, and entitled *Barleeia*, as a just recollection of the exertions of a gentleman who loses no opportunity of enriching science with living objects from the Great Book of Nature; and though the present animal is locally common, it is malacologically an almost unrecorded rarity. We may all blush for our carelessness in not noticing this interesting and unique species, which, though within the range of many naturalists, would still probably have remained in obscurity if it had not been *déterré* and forced into notice by our invaluable friend.

I am, Gentlemen,

Your most obedient servant,

WILLIAM CLARK.

P.S.—Errata in the paper on the genus *Truncatella* in the last July 'Annals:'—vol. xii. p. 7. line 24, for *branchial*, read *oesophageal* streamlets. And *ibid*, p. 6, for Della Chiaje, read Delle Chiaje.

XII.—Description of several new species of British Crustacea.

By WILLIAM THOMPSON, Esq.

[With a Plate.]

HIPPOLYTE WHITEI (mihl). *White's Hippolyte*. Pl. VI. fig. 1.

Spec. Char. Rostrum (fig. 1 *a*) straight, without spines above, and slightly bifid at the apex, beneath with a sharp two-toothed carina, and a minute one near the apex; internal antennæ with the thick filament much-curved.

The carapace of this species is more gracile than any other of the genus, and even more slender than in the genus *Palæmon*; it is terminated by a straight and elongated rostrum, without any spine on its upper side; the apex is rather blunt; beneath there is a short carina, which is deepish, and has two teeth: there is besides a very minute tooth close to the apex, which gives the apex the appearance of being bifid; it is, however, not the case, the apex being quite distinct from the spine, which is placed on the lower edge of the rostrum; there is also a small tooth on each side of the base of the rostrum, just over the inner edge of the orbit, and another spine on each side the carapace in a line underneath the antennæ. The scale of the external antennæ is large, longer than the rostrum; its external